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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,437	07/26/2001	Sang Hoo Dhong	AUS9-2001-0301US1	7370
35236	7590	07/13/2005	EXAMINER	
THE CULBERTSON GROUP, P.C.			TAT, BINH C	
1114 LOST CREEK BLVD.			ART UNIT	
SUITE 420			PAPER NUMBER	
AUSTIN, TX 78746			2825	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/915,437

Applicant(s)

DHONG ET AL.

Examiner

Binh C. Tat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. This office action is in response to application 09/915437 filed on 07/26/01.

Claims 1-18 remain pending in the application.

#### *Response to Arguments*

Applicant's arguments with respect to claims 1-18 have been considered but are persuasive in view of the new ground's of rejection.

#### *Claim Objections*

Claim 1-18 is objected to because "what is mean for sizing the devices in the final circuit".

Correction is required.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Reddy et al., U. S. Patent No. 6460166).
4. As to claims 1, 8, 13, and 14 Reddy et al. teach a method of designing a logic circuit to provide a predetermined logical operation, the method including the steps of: (a) defining a logic synthesis block comprising a dynamic logic circuit (see fig 4, fig 6 and col 4 lines 24 to col 5 lines 43); (b) performing logic synthesis for the predetermined logical operation to produce an

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intermediate circuit, the logic synthesis being performed utilizing a synthesis library constrained to the logic synthesis block (see fig 4-6 and fig 11 and fig 12 fig 13 col 6 lines 23 to col 7 lines 55); (c) eliminating unused devices in the intermediate circuit to produce a final circuit (see fig 11-13 col 6 lines 23 to col 7 lines 8); and (d) sizing the devices in the final circuit (see fig 9, 11, 12 col 5 lines 54 to col 6 lines 42).

5. As to claim 2, 9, and 15 Reddy et al. teach wherein the step of defining the logic synthesis block includes selecting the largest practical dynamic AND/OR circuit for the integrated circuit fabrication technology in which the circuit is to be implemented (see fig 4-10 col 5 lines 35 to col 6 lines 15).

6. As to claim 3, 10, and 16 Reddy et al. teach wherein the logic synthesis block comprises a four high and four wide dynamic AND/OR circuit (see fig 4-6 and fig 11 and fig 12 fig 13 col 6 lines 23 to col 7 lines 55).

7. As to claim 4, 11, and 17 Reddy et al. teach wherein the step of performing logic synthesis includes leaving the size of the devices in the logic synthesis block substantially unconstrained (see fig 9, 11, 12 col 5 lines 54 to col 6 lines 42).

8. As to claim 5, Reddy et al. teach wherein the step of eliminating unused devices from the intermediate circuit includes detecting devices having a state that remains constant as the intermediate circuit operates to provide the predetermined logical operation (see fig 11-13 col 6 lines 23 to col 7 lines 8).

9. As to claim 6, Reddy et al. teach wherein the step of sizing the devices in the final circuit includes analyzing the final circuit to determine the characteristics of each device in the final

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circuit necessary in order to consistently provide the predetermined logical operation and meet drive requirements (see fig 9, 11, 12 col 5 lines 54 to col 6 lines 42).

10. As to claim 7, 12, and 18 Reddy et al. teach wherein the logic synthesis block uses a single activation/reset clock signal (see fig 4-10, 11, 12 col 5 lines 54 to col 7 lines 55).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (703) 305-4855. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (703) 308-1323. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh Tat  
Art unit 2825  
July 7, 2005

*Aluando*

THUAN DO

Primary examiner

07/01/2005.